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|---|---|
| ASHBURN, STEVEN L | |

| ART UNIT | PAPER NUMBER |
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| 3714 | |

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8

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/847,051 | MARTINEK ET AL. | |
| | Examiner | Art Unit | |
| | Steven Ashburn | 3714 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 August 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 3, 6, 7, 12, 13, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller, U.S. Patent 6,322,445 (Nov. 27, 2001).**

*Miller* discloses a computerized wagering game apparatus employing a pc-based controller having components designed to be retrofit. In particular, the processing system is implemented using a personal computer using a standard communication bus. *See col. 5:5-35.* This choice permits the system to be implemented with a wide variety of commercially available components. *See id.* This choice also permits the periodic retrofit of the processing system with new and faster components as they become available. *See id.* The I/O control module is a custom logic interface providing connection between the user interface units and the processing system. *See id.* The various user interface units comprise one or more electromechanical devices that interact with the game player. *See id.* These devices accept signals generated by the I/O control module instructing the units to perform operations. *See id.* These units also generate signals received by the I/O control module for use by the game software executed in the main processing module. *See id.*

Regarding claims 1 and 18: *Miller* teaches the following features:

a) A universal computerized game controller (202) operable to control a computerized wagering game including a controller interface (304) and a universal controller (301) for processing game and operating system instructions. *See fig. 1b; col. 4:61-36.*

b) Game system devices (221-225). *See id.*

c) A game translator (305) for translating game events between the game system devices and the controller wherein the controller interface operates as an interface for the universal controller. *See id.*

Hence, the claims are unpatentable because *Miller* anticipates each of the claimed features.

Regarding claim 2: It s implicit in *Miller* that the controller interface includes data bus drivers to control and configure the hardware to communicate data on the data bus between the controller and other devices. *See id.*

Regarding claim 3: Is implicit in *Miller* that the controller interface includes an address decoder to decode addresses transmitted in the data buses to store and recall data from particular memory locations. *See id.*

Regarding claims 6 and 7: *Miller* implicitly teaches an identification module unique to the system wherein the identification module is a silicon serial number. In particular, *Miller* describes a pc-based processor manufactured by Intel Corp. All Pentium-III® and later processor are manufactured with an identification module containing a silicon serial number to enhance security.

Regarding claim 12: *Miller* teaches a logic communications bus for handling logic-level signals between the interface controller and the game translator interface. *See fig. 1b; col. 4:61-36.* In particular, *Miller* employs a PCI-type bus.

Regarding claim 13, *Miller* additionally teaches a translator operating to translate events between logic-level signals and game event signals. *See fig. 1b; col. 5:25-35.* More specifically, *Miller* discloses a plurality of devices that produce game event signals including, for example, a button panel (224). These logic-level signals are implicitly translated into logic-level signals by the translator module when transferred to the PCI bus. *See id.*

Regarding claim 16: *Miller* additionally teaches a video gaming system. *See col. 3:42-48.*

***Claim Rejections - 35 USC § 103***

**Claims 4, 5, 8-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Miller* in view of Carlson, U.S. 5,707,286 (Jan. 13, 1998).**

Regarding claim 4: *Miller* describes all the features of the instant claim except employing non-volatile random access memory (NVRAM). *Carlson* teaches using NVRAM in a gaming device in order to store information that is desirable saved even if power is removed. *See col. 8:16-46.* Thus, in view of *Carlson*, it would be obvious to an artisan at the time of the invention to modify the gaming system taught by *Miller* to add the feature of employing NVRAM. As suggested by *Carlson*, the modification would allow the device to store information that is desirable saved even if power is removed and thereby avoid liability from loss of data during a power outage. *See id.*

Regarding claim 5: *Carlson* additionally teaches the controller interface having read only memory (ROM) for storing game system programs. *5:15-24.*

Regarding claim 8: *Carlson* additionally teaches a game operating system controller including ROM for storing gaming operating system programs. *See col. 9:25-31.*.

Regarding claims 9 and 10: *Carlson* additionally teaches flash memory for storing gaming program unique to the gaming system. *See col. 9:54-10:55.*

Regarding claim 11, *Miller* additionally suggests the flash memory being a removable memory card. *See id.*

Regarding claim 17: *Carlson* additionally suggests mechanical, reel-based slot machine. *See col. 4:15-24.* It is implicit that a reel-based slot machine includes a location sensor and mechanical reel-device. Hence the combination of *Miller* in view of *Carlson*, wherein a game translator interface for receiving game events and driving external devices, describes a mechanical, reel-based slot machine having a location sensor and mechanical reel device wherein the game translator includes a receiver for handling game events associated with the location of the sensor device and a driver for handling game events associated with the mechanical reel device.

**Claims 14, 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Miller* in view of Fargo, U.S. Patent 4,792,470 (Nov. 20, 1990)**

Regarding claim 14: *Miller* teaches all the features of the claim except a driver/receiver module for translating between events and logic level signals and event signals. *Fargo* discloses a universal interface configurable to translate between a controller and two or more peripheral devices. *See abstract.* The interface includes a driver/receiver module for translating between logic level commands and events for peripheral devices. *See fig 2., 3a* In view of *Fargo*, it would have been obvious to an artisan at the time of the invention to modify *Miller*, wherein a translator module translates between a controller and peripheral game devices, to add the feature of a driver/receiver module for translating between events and logic level signals and event signals. As taught by *Fargo*, the modification would enhances translator module by providing a universal interface adaptable to a desired configuration or function. *See col. 1:21-24.*

Regarding claim 15: *Fargo* additionally discloses that the driver/receiver module is a voltage converter. *See fig. 3b.*

Regarding claim 24: *Fargo* additionally discloses a translator configured to automatically detect a connection of the system devices to the translator. *See col. 1:26-29.*

**Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Miller* in view of Fargo, U.S. Patent 4,792,470 (Nov. 20, 1990)**

Regarding claims 19 and 20: By definition, "retrofit" means fitting into equipment already in existence or service; or substituting new or modernized parts or systems for older equipment. *The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company.* One of ordinary skill in the art of gaming would possess knowledge of retrofitting.

The specific steps of removing, installing and interfacing components are within the ordinary technical knowledge of an artisan.

*Mardsen* discloses a universal control system for that may be used as a retrofit for special purpose systems. *See p. 2.* It describes special purpose controllers as disadvantageous because they do not allow low-cost, performance enhancing modifications for extending their useful life. *See p. 1.* Instead, *Mardsen* teaches that universal controllers offer several advantages including (1) allowing one controller to be used for many tasks with few changes to the hardware; (2) reducing to the cost and effort of development; and (3) overcoming the inflexible nature of a legacy controller and the redesign costs limiting to its original, special purpose. *See pp. 1-2.* Moreover, *Mardsen* suggests that a universal controller would benefit a wide range of commercial applications. *See p. 3.*

*Mardsen* illustrates what is generally known in industries that rely on electronic processors to control their systems. It is a common problem to replace obsolete special purpose controllers with modernized ones. A described in *Mardsen,* rather than develop another special purpose processor, a common solution is to purchase a universal processor and customize it to a particular application. A plethora of universal controllers and interface adapter modules are commercially available for this purpose. Notably, the vendors typically offer technical assistance to teach a customer how to adapt the controller to their application. One of ordinary skill in the art of gaming devices would hold knowledge of the common problem of retrofitting modernized controllers, the commercially availability of off-the-shelf universal controllers, and their potential use as embedded controllers in a gaming device.

In regard to the claims, *Mardsen* teaches or suggests all the features of the instant claim except retrofitting a gaming machine; and installing a translator module for translating events between system devices and the controller wherein the controller interface operates as an interface between the universal controller and the translator.

By definition, "retrofit" means fitting into equipment already in existence or service; or substituting new or modernized parts or systems for older equipment. *The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company.* One of ordinary skill in the art of gaming would possess knowledge of retrofitting. In terms of a gaming device controller, retrofitting a controller inherently involves the steps of removing the old controller and substituting a modernized controller. The specific steps of removing, installing and interfacing components are within the ordinary technical knowledge of an artisan.

*Miller* discloses a computerized wagering game apparatus employing a pc-based controller allowing retrofit of the system components. In particular, the processing system is implemented using a personal computer using a standard communication bus. *See col. 5:5-35.* This choice permits the system to be implemented with a wide variety of commercially available components. *See id.* This choice also permits the periodic retrofit of the processing system with new and faster modules as they become available. *See id.* Hence, it is known in the art to retrofit gaming devices to modernize their components.

*Green* discloses a gaming system in which a new peripheral game component may be retrofit into an existing device. *See fig. 6(50); col. 4:51-62, 9:21-32.* It teaches that retrofitting the new component into an existing gaming device often requires an interface module to translate data exchanged between the existing and new components. *See id.* Hence, it is known in the art to retrofit a gaming device with modernized component by installing an interface module to translate data signals between the new old (i.e. legacy) components and the new component. As dicussed above, an artisan would possess knowledge that there are many commercial off-the-shelf interface and data acquisition modules for this purpose.

In view of *Miller* and *Green*, it would have been obvious to an artisan at the time of the invention to modify *Mardsen,* wherein a universal controller is retrofit for a special purpose controller, to retrofit a gaming machine and installing a translator for translating events between system devices and the

controller wherein the controller interface operates as an interface between the universal controller and the translator. As suggested by *Miller*, retrofitting a gaming machine with universal controller allows the device to be easily modernized. *See col. 5:5-35.* Furthermore, as suggested by *Green*, that retrofitting the new component into an existing gaming device often requires an interface module to translate data exchanged between the existing and new components. *See fig. 6(50); col. 4:51-62, 9:21-32.*

In regards to claim 21, *Miller* additionally teaches operating the casino wagering system. *See fig. 1b; col. 1:65-2:18.*

In regards to claim 22, *Miller* additionally teaches playing an existing game on the casino wagering system. *See id.*

In regards to claim 23, *Miller* additionally teaches operating the game using existing gaming system devices. *See col. 2:40-3:5, 4:21-36.*

**Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Miller* in view of Dabrowski, U.S. Patent 6,379,246 B1 (Apr. 30, 2002).**

*Miller* teaches all the features of the claim except executing the system's instructions in a LINUX operating system. LINUX is a well known operating system usable with PC-based controllers. It is "open source" and intended to be customized to specific applications (unlike proprietary operating systems such as Microsoft WINDOWS). Furthermore, based on UNIX, LINUX is more robust than competing operating systems. Still furthermore, it is known to employ LINUX as an operating system in gaming device because it is advantageous to use off-the-shelf software. *See, Dabrowski, col. 6:12-25.* Hence, it would be obvious to modify the gaming device disclosed by *Miller*, wherein the controller is pc-

based, to executing the system's instructions in a LINUX operating system because the software is customizable, robust and available off-the-shelf.

**Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Miller*.**

Miller discloses a game controller and I/O interface for controlling various gaming system devices including buttons, keyboards, hopper, coin acceptor, meters, bill valuator, output display. See fig. However, Miller does not particularly describe a joystick, pressure plates, touch screen, speaker, jackpot control, or card reader. Regardless, these devices are known in the art and fall within the family of game system devices described by Miller. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gaming device disclosed by Miller, wherein the system controls a plurality of gaming system devices, to add the feature of controlling joystick, pressure plates, touch screen, speaker, jackpot control, or card reader and thereby allow the system to control gaming devices commonly employed in gaming devices.

***Response to Arguments***

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

***Prior Art, Not Relied On***

The following prior art of record is not relied upon but is considered pertinent to applicant's disclosure:

a. WinSystems, <www.http://webarchive.org/web/19881212034126/-http://winsystems.com/> (Dec. 12, 1998), downloaded from the Internet on Oct. 27, 2003 discloses universal embedded controllers and I/O interfaces.

b. RTDUSA, <www.http://webarchive.org/web/1990422091026/-http://rtdusa.com/> (Apr. 22, 1999), downloaded from the Internet on Oct. 27, 2003 discloses universal embedded controllers and I/O interfaces.

c. Neoman, WO 96/14614 (May 17, 1996) discloses a universal controller having a plurality of interface modules allowing communication with a wide variety of peripheral devices.

d. Johnson, U.S. Patent 5,264,958 (Nov. 23, 1993) discloses a universal interface module for translating data signals between a plurality of standards.

e. Chan, U.S. Patent 4,500,933 (Feb. 19, 1985) discloses a universal interface module for translating data signals between a plurality of data formats.

f. Strugur, U.S. Patent 4,250,563 (Feb. 10, 1981) discloses a universal interface module for translating data signals between a plurality of data formats.

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Ashburn whose telephone number is 703 305 3543. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 1148.

s.a.
October 30, 2003

MARK SAGER
PRIMARY EXAMINER